

August 19, 2020

To: Lyme Select Board

From: Jim Nourse and Matt Brown, for the Lyme Energy Committee

Re: Fuel Source for Highway Garage

Motivated by a phone conversation between Matt and Select Board member Ben Kilham this past Saturday, we did more reading and research and reached out again to the members of the Town's Energy Committee, specifically on the question of whether the replacement heating system for the Town Highway Garage should be fueled by wood pellets or propane. Although we were not able to engage in a discussion beyond one-on-one interchanges because we had not formally posted any meeting, we did get feedback from a number of our committee members. We wish to share with the Selectmen the following concerns:

1. Warrant Article #22. We think our committee likely represents the sentiment of a large portion of the town's voters that approved the warrant article on transitioning to renewable sources of energy (see below). The Town has followed this mandate by choosing a wood pellet boiler for the new fire station. To replace the current biomass technology with a fossil fuel solution is both a notable inconsistency and has the appearance of taking a step backward. Our concern is that such a decision runs the risk of setting a precedent for the Town to continue adopting fossil fuels and making it more difficult to motivate homeowners to make their own conservation efforts as we transition to renewable energies in the future.
2. Advantages of biomass.
 - a. While burning wood does give off CO₂, it is the same amount that the wood captured from the atmosphere during its growth period. Responsible management of our northern forests actually ensures the health of the forest, allowing it to remain a significant carbon sink.
 - b. The Intergovernmental Panel on Climate Change has stated that burning wood pellets for heating in areas like the Northeast United States is important now and later for climate impact.
 - c. Choosing wood pellets keeps our energy dollars in this town and region; 85% of the expenditures on oil and propane leave the town, state and region.
3. Maintenance concerns re: pellet boilers. We reached out again to both Scott Nichols and Morton Bailey on the subject of maintenance for their proposed pellet boiler systems. They both reiterated maintenance times (in the form of emptying ash drawers) of the nature of 10-15 minutes/month. In addition, pellet boilers have the technical capability to be monitored remotely by the contractor to ensure reliable, steady service even in the absence of this minimal maintenance on-site.

4. Projected costs. It is extremely difficult to find any reliable predictions about the future real costs of energy. The only thing we know about fuel costs is history. Historically, pellet fuel prices have been lower and more stable than oil and propane, and the data we collected from the Town suggests that the current pellet boiler at the Highway Garage has saved the Town money. Historically, pellet boilers pay for themselves. With thermal renewable energy credits, pellet fuel is still less expensive than propane.

It is prudent to also consider the factors surrounding a propane choice. Propane must be imported into our town and region – a factor which will influence future expenditures by the provider in infrastructure and transportation. Current supplies of propane rely heavily on the nation's fracking business, which is becoming increasingly subject to environmental restrictions and water shortages. Changes in state and federal administrations will have an impact on cost – and these cannot be reliably predicted. Propane is an explosive, toxic fuel; wood pellets are benign and non-toxic.

We encourage the Select Board to look past any short-term estimates of fuel budgets as the decision on this heating system is one the Town will live with for 20+ years.

The Committee cannot speak to the actual purchase/installation/warranty cost comparisons of the current bids as we have not seen the figures attached to each.

The Committee thanks the Select Board for seeking our input in this decision.

For the Committee,
Jim Nourse, Chair
Matt Brown

Article 22. To see if the Town of Lyme will vote to commit to a goal of 100% reliance on clean, renewable sources of electricity by 2030 and clean, renewable sources for all other needs, including heating and transportation, by 2050. The impetus for this goal is to reduce energy costs to the community and to keep energy dollars in the local economy; to reduce the risks to the community of escalation and volatility in energy costs; and to address the threat of global climate change. The intent of this article is to influence policy at the local level in a fiscally responsible manner that will support and encourage individual action to shift towards 100% clean, renewable energy.

(This article is recommended by the Energy Committee, 7-0.)

(Recommended by the Select Board by a vote of 3-0.)